

CLAIMS

1. An adjustable hinge for mounting a first member to a second member, comprising:
a first plate that is attached to the first member;
a second plate that is attached to the second member;
a hinge pin; and
5 a first connecting member associated with the first plate and having a hole through which the hinge pin passes to pivotally attach the first connecting member to the first plate, the first connecting member having an extension; and
a second connecting member associated with the second plate and having a hole through which the first connecting member extension passes;
10 wherein the hinge pin is used as an adjustment to move the first connecting member along the hinge pin and thereby adjust the position of the first member with respect to the second member in a first direction; and wherein the position of the second connecting member is changed with respect to the first connecting member extension to thereby adjust the position of the first member with respect to the second member in a second direction.
- 1 2. The adjustable hinge of claim 1 wherein the hinge pin has a longitudinal axis and is
2 threaded, and the hole through the first connecting member is also threaded and the hinge pin is
3 screwed there through, and to accomplish the adjustment of the first member in the first direction
4 with respect to the second member the hinge pin is turned about its longitudinal axis and thereby
5 causes the second connecting member to move along the hinge pin.
3. The adjustable hinge of claim 2 wherein the first connecting member extension is threaded and there is a nut threaded onto the extension at either side of the hole through the second connecting member, the nuts are normally tightened against the second connecting

member at either side of the hole there through to prevent the second connecting member from
5 moving along the first connecting member threaded extension, and wherein one nut at one side
of the hole is loosened and turned away from the side of the hole it is adjacent to while the nut at
the other side of the hole is tightened against the second connecting member to move it along the
first connecting member threaded extension and thereby adjust the position of the first member
with respect to the second member in a second direction, and when the second connecting
10 member is properly repositioned along the first connecting member threaded extension the one
nut is again tightened against the second connecting member to lock the second connecting
member with respect to the first connecting member.

4. The adjustable hinge of claim 1 wherein the first connecting member extension is
threaded and there is a nut threaded onto the extension at either side of the hole through the
second connecting member, the nuts are normally tightened against the second connecting
member at either side of the hole there through to prevent the second connecting member from
5 moving along the first connecting member threaded extension, and wherein one nut at one side
of the hole is loosened and turned away from the side of the hole it is adjacent to while the nut at
the other side of the hole is tightened against the second connecting member to move it along the
first connecting member threaded extension and thereby adjust the position of the first member
with respect to the second member in a second direction, and when the second connecting
10 member is properly repositioned along the first connecting member threaded extension the one
nut is again tightened against the second connecting member to lock the second connecting
member with respect to the first connecting member.

5. An adjustable hinge for mounting a door or gate to a fixed member, comprising:
a first plate that is attached to the fixed member;
a second plate that is attached to the edge of a door or gate;
a hinge pin; and

- 5 a first connecting member associated with the first plate and having a hole through which the hinge pin passes to pivotally attach the first connecting member to the first plate, the first connecting member having an extension; and
- a second connecting member associated with the second plate and having a hole through which the first connecting member extension passes;
- 10 wherein the hinge pin is used as an adjustment to move the first connecting member along the hinge pin and thereby adjust the position of the door or gate with respect to the fixed member in the vertical direction; and wherein the position of the second connecting member is changed with respect to the first connecting member extension to thereby adjust the position of the door or gate with respect to the fixed member in the horizontal direction.

- 1 6. The adjustable hinge of claim 5 wherein the hinge pin has a longitudinal axis and is
2 threaded and the hole through the first connecting member is also threaded and the hinge pin is
3 screwed there through, and to accomplish the adjustment in the vertical direction the hinge pin is
4 turned about its longitudinal axis and thereby cause the first connecting member to move
5 vertically along hinge pin.

7. The adjustable hinge of claim 6 wherein the extension of the first connecting member is threaded and there is a nut on the extension at either side of the hole through the second connecting member, the nuts are normally tightened against the second connecting member at either side of the hole there through to prevent the second connecting member from moving
- 5 along the first connecting member threaded extension, and wherein one nut at one side of the hole is loosened and turned away from the side of the hole it is adjacent to while the nut at the other side of the hole is tightened against the second connecting member to move it along the first connecting member threaded extension and thereby adjust the position of the door or gate with respect to the fixed member in the horizontal direction, and when the second connecting
- 10 member is properly repositioned along the threaded extension the one nut is again tightened

against the second connecting member to lock the second connecting member with respect to the first connecting member.

8. The adjustable hinge of claim 5 wherein the first connecting member extension is threaded and there is a nut on the extension at either side of the hole through the second connecting member, the nuts are normally tightened against the second connecting member at either side of the hole there through to prevent the second connecting member from moving
5 along the first connecting member threaded extension, and wherein one nut at one side of the hole is loosened and turned away from the side of the hole it is adjacent to while the nut at the other side of the hole is tightened against the second connecting member to move it along the threaded extension of the first connecting member and thereby adjust the position of the door or gate with respect to the fixed member in the horizontal direction, and when the second
10 connecting member is properly positioned along the first connecting member threaded extension the one nut is again tightened against the second connecting member to lock the second connecting member with respect to the first connecting member.

9. An adjustable hinge for mounting a door or gate to a fixed member, comprising:
a first plate that is attached to the fixed member;
a second plate that is attached to the edge of a door or gate;
a hinge pin; and
5 a first connecting member associated with the first plate and having a hole through which the hinge pin passes to pivotally attach the first connecting member to the first plate, the first connecting member having an extension; and
a second connecting member associated with the second plate and having a hole through which the first connecting member extension passes;
10 wherein the first connecting member moves freely along the hinge pin as the door or gate is adjusted with respect to the fixed member in the vertical direction; and wherein the position of

the second connecting member is changed with respect to the first connecting member extension to thereby adjust the position of the door or gate with respect to the fixed member in the horizontal direction.

10. The adjustable hinge of claim 9 wherein the extension of the first connecting member is threaded and there is a nut on the threaded extension at either side of the hole through the second connecting member, the nuts are normally tightened against the second connecting member at either side of the hole there through to prevent the second connecting member from moving
5 along the first connecting member threaded extension, and wherein one nut at one side of the hole is loosened and turned away from the side of the hole it is adjacent to while the nut at the other side of the hole is tightened against the second connecting member to move it along the first connecting member threaded extension and thereby adjust the position of the door or gate with respect to the fixed member in the horizontal direction, and when the second connecting
10 member is properly positioned along the threaded extension the one nut is again tightened against the second connecting member to lock the second connecting member with respect to the first connecting member.

11. An adjustable hinge set for mounting a door or gate to a fixed member, comprising:
a first hinge that is attached to the fixed member and to the door or gate, the first hinge being manually adjustable to adjust the position of the door or gate with respect to the fixed member in both a vertical and horizontal direction; and
5 a second hinge that is attached to the fixed member and to the door or gate, and as the first hinge is adjusted to move the door or gate in the vertical direction the second hinge follows the first hinge and does not have to be manually adjusted to change the vertical position of the door or gate.

12. The adjustable hinge set of claim 11 wherein the first hinge comprises:

a frame plate that is attached to the fixed member;

a door plate that is attached to the edge of a door or gate;

a hinge pin; and

5 a first connecting member associated with the frame plate and having a hole through which the hinge pin passes to pivotally attach the first connecting member to the frame plate, the first connecting member having an extension; and

a second connecting member associated with the second plate and having a hole through which the first connecting member extension passes;

10 wherein the hinge pin is used as an adjustment to move the first connecting member along the hinge pin and thereby adjust the position of the door or gate with respect to the fixed member in the vertical direction; and wherein the position of the second connecting member is changed with respect to the first connecting member extension to thereby adjust the position of the door or gate with respect to the fixed member in the horizontal direction.

13. The adjustable hinge set of claim 12 wherein the second hinge comprises:

a first plate that is attached to the fixed member;

a second plate that is attached to the edge of a door or gate;

a hinge pin; and

5 a first connecting member fastened to the first plate and having a hole through which the hinge pin passes to pivotally attach the first connecting member to the first plate, the first connecting member having an extension; and

a second connecting member fastened to the second plate and having a hole through which the first connecting member extension passes and is secured in the hole;

10 wherein the first connecting member is freely moveable along the hinge pin, and as the first hinge is adjusted in the vertical direction the second hinge follows the first hinge by the first connecting member moving freely along the hinge pin.

1 14. The adjustable hinge set of claim 13 wherein the first hinge pin has a longitudinal axis
2 and is threaded and the hole through the first hinge first connecting member is also threaded and
3 the hinge pin is screwed there through, and to accomplish the adjustment in the vertical direction
4 the first hinge pin is turned about its longitudinal axis and thereby causes the first hinge first
5 connecting member to move vertically along the first hinge pin.

15. The adjustable hinge of claim 14 wherein the extension of the first connecting member
for both the first hinge and the second hinge is threaded and there is a nut threaded onto the
extension at either side of the hole through the second connecting member, the nuts are normally
tightened against the second connecting member at either side of the hole there through to
5 prevent the second connecting member from moving along the threaded extension of the first
connecting member, one nut at one side of the hole is loosened and turned away from the side of
the hole it is adjacent to while the nut at the other side of the hole is tightened against the second
connecting member to move it along the threaded extension of the first connecting member and
thereby adjust the position of the door or gate with respect to the fixed member in the horizontal
10 direction, and when the second connecting member is properly positioned along the threaded
extension the one nut is again tightened against the second connecting member to lock the
second connecting member with respect to the extension of the first connecting member.